Utah's Arthritis Report

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UTAH DEPARTMENT OF HEALTH
Arthritis Program

Utah Department of Health

The Utah Arthritis Advisory Committee &
The Utah Department of Health, Bureau of Health Promotion, Utah Arthritis Program

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Dear Reader,

The Utah Arthritis Program, at the Utah Department of Health, is pleased to present the *Utah Arthritis Report*. This report, made possible through funding from the Centers for Disease Control and Prevention, presents comprehensive data detailing arthritis prevalence, burden, and risk factors in Utah for the first time.

Arthritis encompasses more that 100 diseases and conditions and is the primary cause of disability in the United States. Nationally, the costs for medical care and lost productivity due to arthritis are estimated at $65 billion annually. As our population ages, this cost is expected to increase. Approximately one of every six Americans has been diagnosed with arthritis. In Utah, approximately one of every five residents over the age of 18 has been diagnosed with arthritis. Significantly, many individuals with arthritis have not been diagnosed and therefore are not being treated by a physician for these conditions. When these individuals are combined with those who have been diagnosed, it is estimated that ***nearly one of every three Utah residents over the age of 18 have arthritis***.

The data presented in this report represents a baseline against which we can compare future trends and determine if our efforts to improve arthritis outcomes and lessen the burden of arthritis in Utah are successful. These efforts are described in detail in *Utah's Arthritis Plan*, which is available by request from the Utah Arthritis Program. We are pleased to share this report with you and others in the community in hopes of enhancing efforts and opportunities to increase the quality of life for people in Utah affected by arthritis.

Sincerely,

Robert Rolfs, MD
Director, Center for Health Data
State Epidemiologist

Richard C. Bullough, PhD
Director, Utah Arthritis Program
Bureau of Health Promotion

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Acknowledgements

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We are indebted to the following individuals for providing suggestions and comments:

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Executive Summary

Arthritis has been recognized as a leading cause of disability in the United States for many years. However, only recently has there been a statewide focus on arthritis as a major public health concern in Utah.

The findings in this report show that arthritis affects nearly one out of three Utah adults (31%). In addition, the results indicate arthritis is a leading cause of disability that significantly affects the quality of life of Utah citizens.

Further, arthritis generates significant health care costs in Utah. For example in 1998, arthritis was the primary cause of 10,238 hospital discharges and total charges for inpatient hospital stays, and hip and knee replacements due to arthritis were $141,854,910. In addition, total Medicare dollars paid for persons admitted to a hospital with a diagnosis of arthritis in 1999 were $18,793,376, which represented 9% of the total Medicare dollars paid for all diagnoses.

These data should help guide actions to lessen the burden of arthritis in Utah. They also support the need to provide the education, treatment and resources required for managing arthritis in Utah.

Highlights

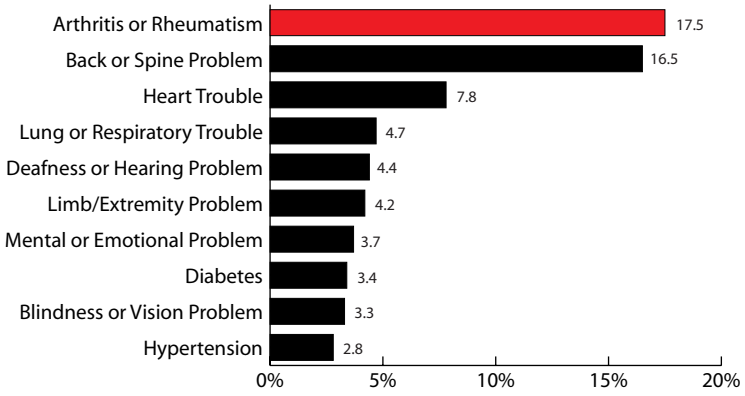
- Arthritis affects almost one of three Utah residents over age 18 (Page 2)
- Nearly one-third of persons with arthritis have chronic joint symptoms only, and have not been diagnosed with arthritis by a doctor (Page 2)
- More Utah women than men have arthritis (35% vs. 27%) (Page 3)
- Nearly three-fourths of Utah residents who have arthritis are working age (18-64) (Page 4)
- Activity limitation due to chronic joint symptoms was reported by 46% of adults with chronic joint symptoms (Page 7)
- Persons with arthritis are 10 times more likely to report that pain limited their activities for 15-30 days during the past month than persons without arthritis (Page 7)
- Total charges for inpatient hospital stays for arthritis and knee and hip replacement procedures in Utah during 1998, were nearly $142,000,000 (Appendix 1, pg. 12)
- Almost one of every ten Medicare dollars paid in Utah during 1999, were for persons with a primary diagnosis of arthritis who were admitted to a hospital (Appendix 2, pg. 13)

Introduction

The word *arthritis* means inflammation of a joint and refers to over 120 different types of arthritis and rheumatic conditions that cause a combination of symptoms such as pain, aching, stiffness and swelling in or around a joint. Some of these conditions include osteoarthritis, rheumatoid arthritis, fibromyalgia, juvenile rheumatoid arthritis, lupus, gout, and bursitis.

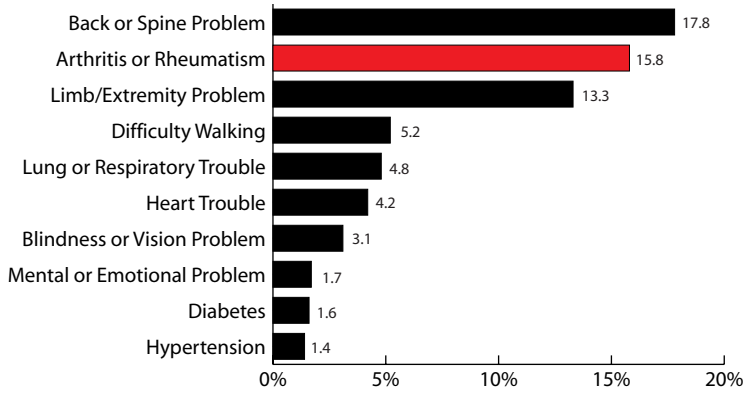
In 1997, arthritis affected nearly 43 million Americans. By the year 2020, CDC estimates that arthritis will affect 60 million Americans. Arthritis is also the leading cause of disability in the United States, limiting everyday activities for more than seven million Americans. By the year 2020, nearly 12 million Americans will experience activity limitation because of arthritis.[1]

Figure 1. Leading Causes of Disability Among Persons 18 and Older United States, 1999[2]



Among Utah residents who limited their activities because of health problems, an outcome different but related to disability, back or spine problems (17.8%) were the most frequent causes of limited activity, followed closely by arthritis (15.8%). (Utah, 2000 Behavioral Risk Factor Surveilence System (BRFSS) Survey.)

Figure 2. Leading Health Problems that Limit Activity Among Utah Adults Who Limited Their Activities



Definition of Arthritis

The CDC defines persons with arthritis as those who have either chronic joint symptoms (CJS) and/or doctor diagnosed arthritis.

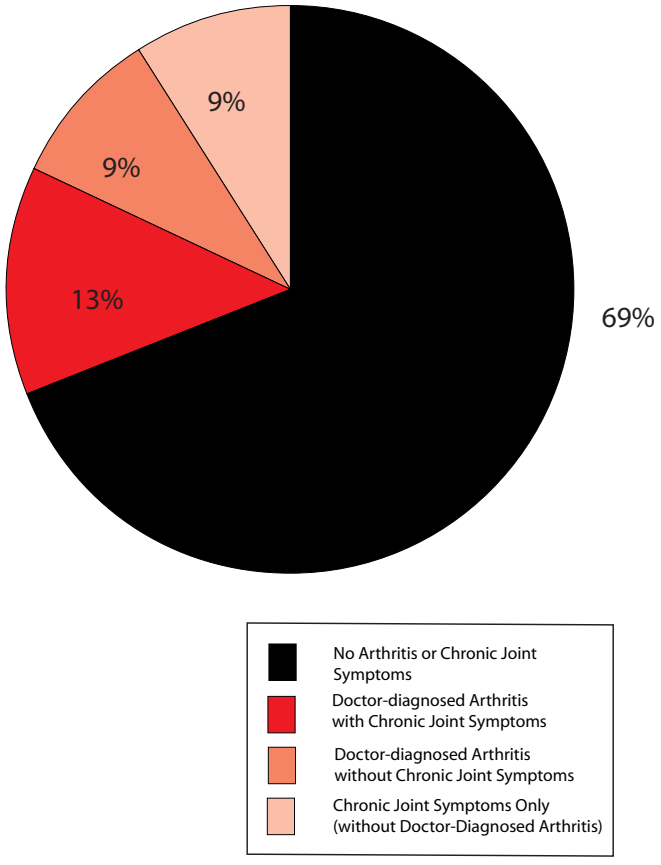
Persons were considered to have CJS if they answered **yes** to both of the following BRFSS questions, *"During the past 12 months, have you had pain, aching, stiffness, or swelling in or around a joint?"* and "*Were these symptoms present on most days for at least one month?*".

Persons were considered to have doctor-diagnosed arthritis if they answered **yes** to the question, *"Have you ever been told by a doctor that you have arthritis?"*.

Using this definition, 2000 Utah BRFSS survey results show that arthritis is a significant public health issue in Utah:

- 31% (448,924) of Utah residents over age 18 have arthritis
- 22% of Utah adults have been diagnosed with arthritis by a doctor
- 9% have chronic joint symptoms only and have not been diagnosed by a doctor
- 13% have doctor-diagnosed arthritis with CJS
- 9% have doctor-diagnosed arthritis without CJS

Figure 3: Percent of Utah's Adult Population With Doctor Diagnosed Arthritis and Chronic Joint Symptoms



Please Note: In all graphs and narrative that refer to BRFSS data, the term *arthritis* refers to persons with CJS and/or doctor-diagnosed arthritis.

Who is at Risk for Arthritis in Utah?

Arthritis affects male and female Utah residents of all ages, races and ethnic groups. However, certain factors are associated with an increased risk of developing arthritis. These factors are separated into non-modifiable, potentially modifiable, and modifiable.

By separating the risk factors into these categories, it allows us to better identify persons who need services and to target our prevention efforts and intervention strategies to reduce disability due to arthritis. In addition, non-modifiable and potentially modifiable risk factors may influence modifiable risk factors.

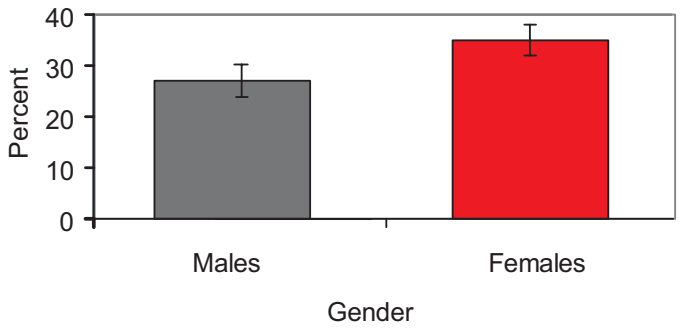
Factors associated with a greater risk of arthritis that are non-modifiable are female gender, genetic predisposition*, older age and race and ethnicity. Factors associated with arthritis that are potentially modifiable include education and income. Although these two factors are associated with arthritis, it is not clear if modifying them would reduce the risk of arthritis. The modifiable risk factors associated with an increased risk of arthritis include obesity, joint injuries*, infections,* and certain occupations*.[4]

Non-modifiable Risk Factors

Gender

Arthritis is more common among Utah females than males. Slightly more than one-third of adult Utah females reported having arthritis. Among females over 18 years of age, 35% reported they have arthritis, compared to 27% of males over age 18 (Figure 4).

Figure 4. Prevalence of Arthritis* by Gender
Utah 2000 BRFSS Survey



*Doctor Diagnosed and/or CJS

* Utah specific data are not available for genetic predisposition, joint injuries, infections, and occupations.

Age

In Utah, the prevalence of arthritis increases with age, rising from 13% among persons 18-34, to 27% among persons 35-49, to over half (52%) among persons 50-64, and 58% among those over 65. Almost three-fourths (74%) of Utah residents with arthritis were between the ages of 18 and 64. For all age groups, females were more likely to report arthritis than were males (Figure 5).

Race/Ethnicity

White, Non-Hispanic and Non-White, Non-Hispanic Utah adults have similar prevalence rates for arthritis (32% and 29% respectively), while prevalence of arthritis among Hispanic Utah adults is 25%.(Figure 6) National rates describing the prevalence of arthritis by race and ethnicity also portray arthritis as a more common condition among Non-Hispanic whites (16%) and Non-Hispanic blacks (15%), while the prevalence among Hispanics is slightly lower (11.2%).[5]

Figure 5. Arthritis* Prevalence by Age Group and Gender
Utah 2000 BRFSS Survey

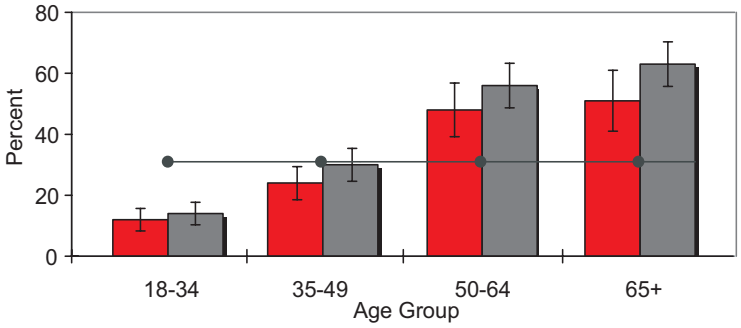
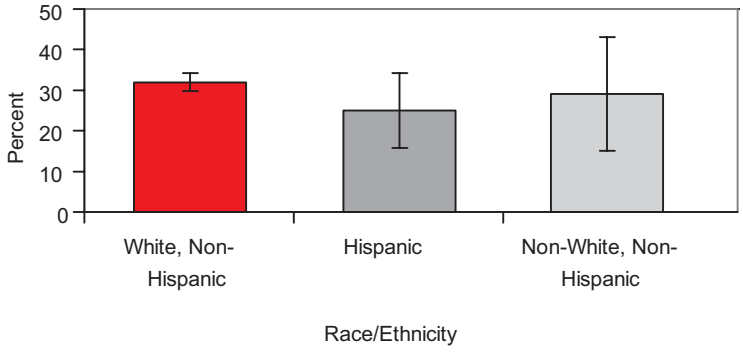


Figure 6. Prevalence of Arthritis* by Race/Ethnicity
Utah 2000 BRFSS Survey



*Doctor Diagnosed and/or CJS

Potentially Modifiable Risk Factors

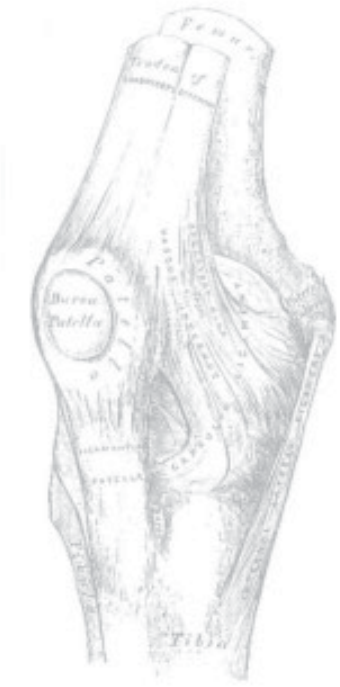
Income*

Among Utah adults, lower income is associated with increased prevalence of arthritis. The prevalence of arthritis is 1.6 times greater among adults living in households with an annual income of less than $20,000, compared to persons earning $50,000 or more.

Education*

Among adults with a high school education or less, 33% have arthritis. Among those persons who have some college education,

* Although income and education are potentially modifiable, it is not clear if modifying them would reduce the risk of arthritis, since the reasons why they are associated with an increased prevalence of arthritis are unknown.[4]



the prevalence is 31%. The prevalence is 28% among those with a college education.

Modifiable Risk Factor

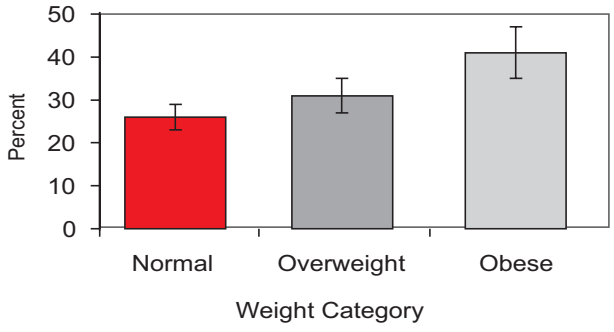
Weight

Body Mass Index (BMI) was used to calculate the weight categories in Figure 7. To calculate BMI, body weight in kilograms is divided by height in meters squared. A person is considered to have normal weight if their BMI is less than 25. A person is overweight if their BMI is more than 25 and less than 30. A person is obese if their BMI is 30 or greater.

Maintaining an appropriate weight lowers a person's risk for arthritis. Obesity is a risk factor for osteoarthritis of the knee in both males and females, and for gout in men.[6-8] Obesity is also associated with increased pain in weight-bearing joints.

The prevalence of arthritis among Utah adults who are obese is 1.6 times greater than among those who have a normal body weight (Figure 7). About 25% of overweight and obese persons with arthritis were trying to lose weight, compared to 13% of overweight and obese persons without arthritis. The fact that a significant percentage of obese and overweight persons with and without arthritis, were not trying to lose weight is a significant and potentially modifiable problem in the prevention and management of arthritis.

Figure 7: Prevelance of Arthritis* by Weight Category
Utah BRFSS Survey



*Doctor Diagnosed and/or CJS

Lifestyle Characteristics of People with Arthritis in Utah

Physical Activity

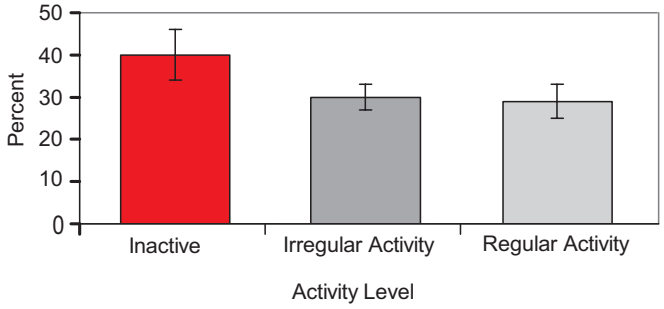
People with arthritis are less physically active than the rest of the adult population. This may be due to pain, loss of joint motion, and fatigue. However, physical activity helps to maintain joint health and may also reduce the risk of other conditions and diseases, including overweight, heart disease, high blood pressure, depression, and anxiety.[9]

Figure 8 shows the prevalence of arthritis is less than 30% among adults who participate in regular activity and increases to 40% among adults with arthritis who are inactive.

Limitation of Activities

When persons with doctor-diagnosed arthritis and CJS were asked if they were limited in any way in any activities because of a physical, mental or emotional problem, they reported activity limitation twice as frequently as persons without arthritis. Limiting activity adds measurably to disease-related impairments and disability for people with arthritis. (Figure 9)

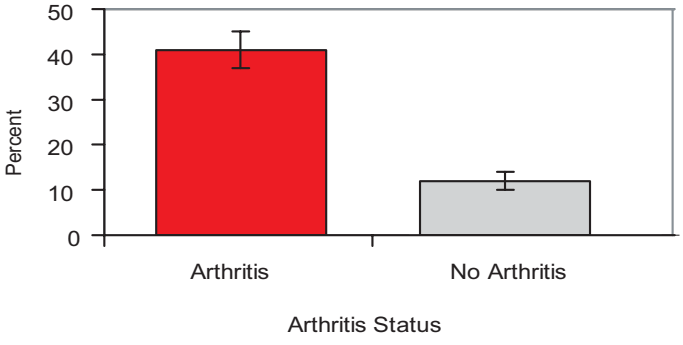
Figure 8. Prevalence of Arthritis* by Activity Level**
Utah 2000 BRFSS Survey



*Doctor Diagnosed and/or CJS

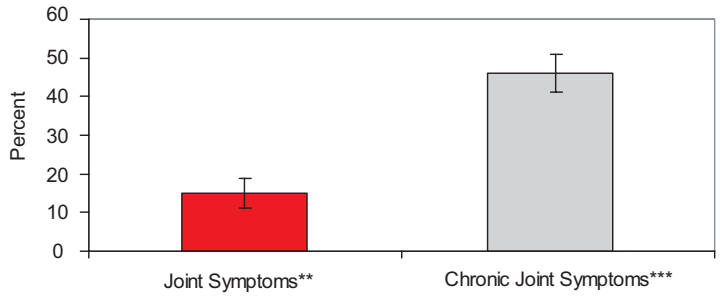
** Inactive = No leisure-time physical activity
Irregular Activity = Some activity, but less than five times per week or less than 30 minutes per session
Regular Activity = Five times per week, 30 minutes per session, regardless of intensity

Figure 9. Percentage of Utah Adults with Activity Limitation by Arthritis* Status
Utah 2000 BRFSS Survey



*Doctor Diagnosed and/or CJS

Figure 10. Percentage of Adults with Activity Limitation*
Due to Joint Symptoms Utah 2000 BRFSS



*Doctor Diagnosed and/or CJS

* Activity limitiation is defined by a yes to the question "Are you now limited in any way in any activities because of joint symptoms?"

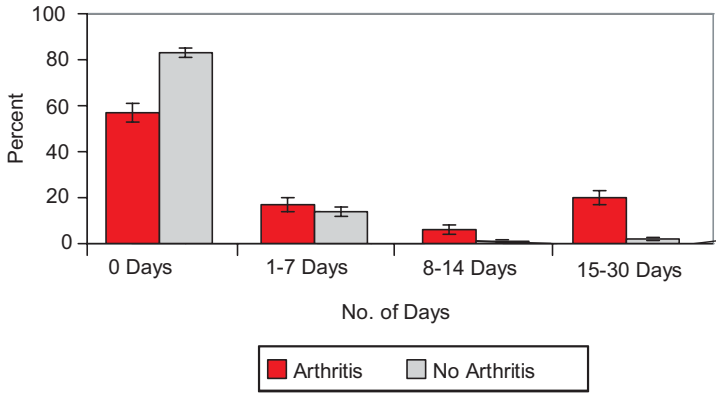
** Joint symptoms is defined by a yes to the question "During the past 12 months have you had pain, aching, stiffness, or swelling in or around a joint?"

*** Chronic joint symptoms is defined by a yes to both of the following questions "During the past 12 months, have you had pain, aching, stiffness, or swelling in or around a joint?" and "Were these symptoms present on most days for at least one month?"

As seen in Figure 10, 46% of adults with CJS, and 15% of adults with acute joint symptoms reported activity limitation due to joint symptoms.

Utah adults with arthritis were ten times more likely to report that pain limited their activities for 15 to 30 days during the past month than those without arthritis, and only 70% as likely to report their activities were not limited by pain on any day during the preceding month than those without arthritis (Figure 11).

Figure 11. Percentage of Utah Adults
Who Reported that Pain Limited Their Activities
By Number of Days and Arthritis* Status



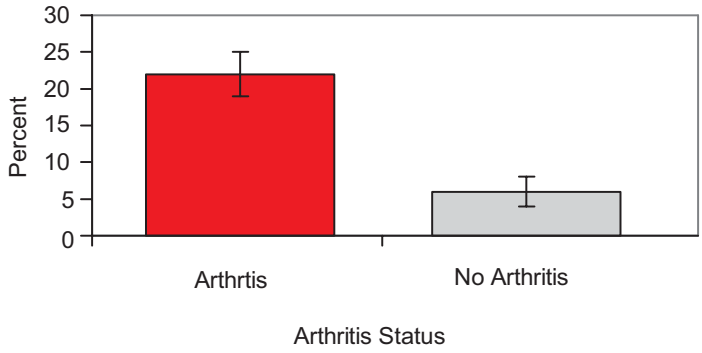
*Doctor Diagnosed and/or CJS

Health Related Quality of Life among Utah Adults with Arthritis

Health Status

Adults with arthritis in Utah were three times as likely to report being in fair or poor health than adults without arthritis. Of Utah adults with arthritis, 22% consider their health status as fair or poor, compared to 7% of adults without arthritis. (Figure 12)

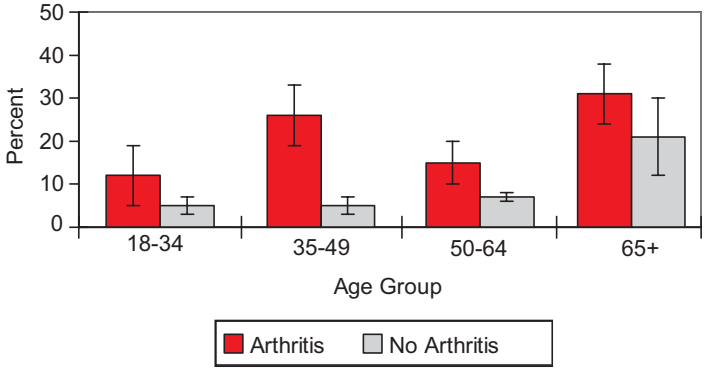
Figure 12. Percentage of Utah Adults Reporting Fair or Poor Health by Arthritis* Status Utah 2000 BRFSS Survey



*Doctor Diagnosed and/or CJS

Figure 13 suggests that the higher prevalence of self-reported poor or fair health among persons with arthritis occurs at all ages. Utah adults 35-49 who have arthritis were five times more likely to report fair or poor health status than persons of the same age without arthritis.

Figure 13. Percentage of Utah Adults Reporting Fair or Poor Health by Age Group and Arthritis* Status Utah 2000 BRFSS Survey



*Doctor Diagnosed and/or CJS

Utah adults with arthritis with less than a high school education were almost four times more likely to report their health status as fair or poor compared to college graduates with arthritis (Figure 14.) While reasons for this remain unclear, it is possible that those who are more educated have learned how to obtain information and resources that allow them to better manage their arthritis.

Unhealthy Days

Figure 15 shows that adults with arthritis reported three times more days of poor physical health each month than persons without arthritis. In Utah, adults with arthritis average six days of poor physical health per month, while individuals without arthritis average only two days of poor physical health per month (Figure 15.)

While Utah adults with arthritis report more days of poor mental health than adults without arthritis, the disparity between the two groups was not as great as that seen in physical health. Adults with arthritis had a mean of four days per month when mental health was poor, compared to three days per month for those without arthritis.

Further, adults with arthritis were two times more likely to report being unable to do their usual daily activities compared to persons without arthritis. The mean number of days per month when persons with arthritis were unable to do their usual activities was four, while those without arthritis only experienced two days per month when they were unable to do their usual activities (Figure 15.)

These measures clearly show the impact of arthritis on daily life. Overall, persons with arthritis have more unhealthy days than those without arthritis.

Figure 14. Percentage of Utah Adults Reporting Fair or Poor Health by Arthritis* Status and Education Level
Utah 2000 BRFSS Survey

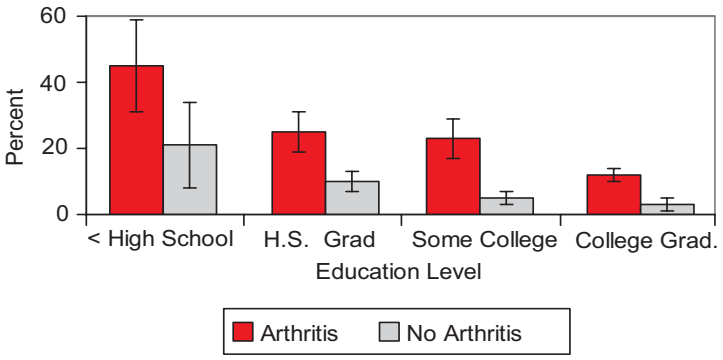
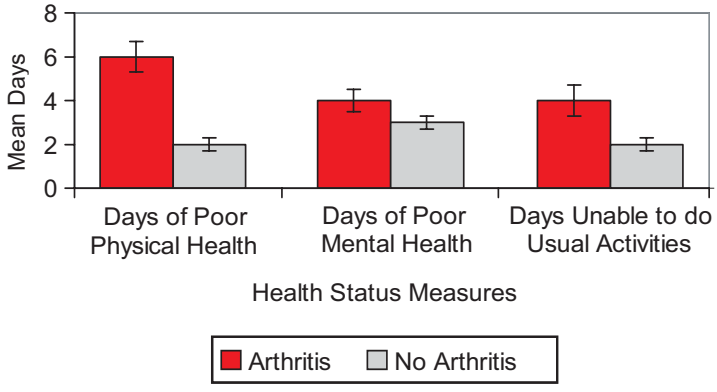


Figure 15. Impact of Arthritis on Health Status
By Arthritis* Status
Utah 2000 BRFSS Survey



*Doctor Diagnosed and/or CJS

Suggestions for Action

Detailed goals, objectives and action steps are not within the scope of this report. However, this information can be found in The Utah Arthritis Plan. This document is a comprehensive plan for improving the wellbeing of those effected by arthritis in Utah and is available on request from the Utah Arthritis Program at the Utah Department of Health.

A summary of suggestions for action based on the data presented in this report include:

Reduce the burden of arthritis in those with arthritis and, when possible prevent arthritis. Areas of focus should include:

- ✔ Promoting evidence-based means of controlling arthritis such as the Arthritis Self-Help Course
- ✔ Promoting exercise and physical activity as a part of daily living for people with arthritis, and
- ✔ Partner with existing programs focused on reducing overweight and obesity in Utah adults

Target specific populations for these efforts:

- ✔ Particularly Utah females aged 40-64
- ✔ Utah residents 65 and older, and
- ✔ Those having chronic joint symptoms without a doctor's diagnosis of arthritis
- ✔ Individuals with special health care needs including those living in rural areas and potentially minority and ethnic populations

Continue measuring and reporting arthritis prevalence and trends in Utah:

- ✔ Communicate and educate about the importance of arthritis as a public health issue in Utah
- ✔ Monitor the progress of prevention and intervention measures
- ✔ Further define arthritis risks and high risk groups
- ✔ Monitor the impact of arthritis in Utah and associated trends
- ✔ Guide and focus Utah Arthritis Program efforts, and
- ✔ Contribute to national arthritis data and compare Utah trends to those in the nation and other states

Appendix One: 1998 Utah Hospital Discharge Data

The data presented below are the 1998 Utah hospital discharge data. We reviewed data from the hospital discharge database from 1992 to 1998. If you want data for these additional years, please contact Randy Tanner at 538-9193 or e-mail Randy at rtanner@doh.state.ut.us

The ICD-9-CM diagnostic codes, approved by the National Arthritis Data Workgroup (NADW)[10], were used in the analysis of these data.

1998 Utah Hospital Costs

Please note: These figures do not include other medical care expenses, pharmacy costs, disability, or lost wages.

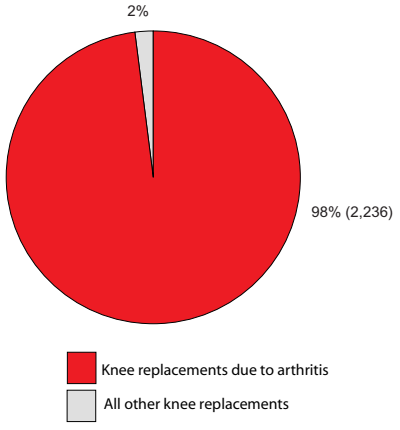
Arthritis related discharges and costs

- ✔ 98% of knee replacements were due to arthritis (figure 16)
- ✔ In 1998, there were 6,875 inpatient discharges with a primary diagnosis of arthritis in Utah
- ✔ 76% of these discharges were for persons over age 55
- ✔ An average inpatient length-of-stay with a primary diagnosis of arthritis was 4.4 days
- ✔ Total charges for hospital stays with a primary diagnosis of arthritis were $82,369,516
- ✔ 79% of these charges were for persons over age 55
- ✔ An average total charge for hospital stays with a primary diagnosis of arthritis was $13,874

Knee replacement discharges and costs

- ✔ There were 2,236 inpatient discharges for knee replacement procedures with a primary diagnosis of arthritis
- ✔ 88% of these procedures were performed on persons over age 55
- ✔ An average length-of-stay for knee replacement procedures with a primary diagnosis of arthritis was 4.2 days
- ✔ 63% of knee replacement procedures due to arthritis were performed on females, the remaining 37% were performed on males
- ✔ An average total charge for a knee replacement procedure with a primary diagnosis of arthritis was $18,244
- ✔ Total charges for knee replacement procedures with a primary diagnosis of arthritis were $39,626,226
- ✔ 88% of these charges were for persons over age 55

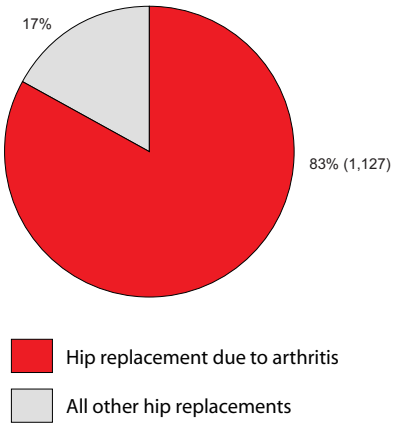
Figure 16: Percentage of Knee Replacements With a Primary Diagnoses of Arthritis



Hip replacement discharges and costs

- ✔ 83% of hip replacements were due to arthritis.
- ✔ There were 1,127 inpatient discharges for hip replacement procedures with a primary diagnosis of arthritis
- ✔ 85% of these procedures were performed on persons over age 55
- ✔ An average length-of-stay for hip replacement procedures with a primary diagnosis of arthritis was 4.3 days
- ✔ 56% of hip replacement procedures due to arthritis were performed on females, the remaining 44% were performed on males
- ✔ An average total charge for a hip replacement with a primary diagnosis of arthritis was $18,054
- ✔ Total charges for hip replacement procedures with a primary diagnosis of arthritis were $19,859,168
- ✔ 84% of these charges were for persons over age 55

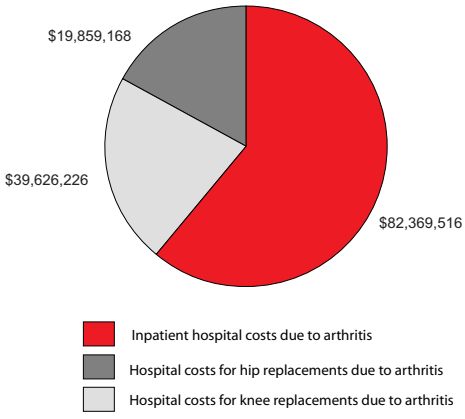
Figure 17: Percentage of Hip Replacements with a Primary Diagnoses of Arthritis
1998 Hospital Discharge Database



Total charges for hospital stays and hip and knee replacements due to arthritis

- ✔ Total charges for hospital stays, and hip and knee replacements primary diagnosis of arthritis were $141,854,910. 82% of these charges were for persons over 55. Figure 18 presents detail about these costs..

Figure 18: 1998 Inpatient Hospital Costs Associated with a Primary Diagnoses of Arthritis



Appendix Two – 1999 Medicare Hospital Discharge Data

All of the Medicare clients were identified from the 1996 to 1999 Medicare files supplied by the Health Care Finance Administration (HCFA) and maintained in Utah by *HealthInsight*. However, we have chosen to present only the 1999 Medicare data. The ICD-9-CM diagnostic codes, approved by the National Arthritis Data Workgroup (NADW)[10] , were used in the analysis of these data.

To be included in the denominator for a specific year, a client had to meet these criteria:

1. Clients older than 65 (age is based on a person's age on 12/31 of that year) had to be residents of Utah, alive on December 31st of that year, enrolled in Part B for the entire year, and have not been enrolled in an HMO for more than one month

2. For clients age 65 the criteria were slightly different. They had to be enrolled in Part B from the month of their birth to the end of the year, and not be enrolled in an HMO between their month of birth and the end of the year.

1999 Utah Highlights

- ✔ 2,324 (7%) of all Medicare hospital admissions in 1999 had a primary diagnosis of arthritis.

- ✔ Total Medicare dollars paid for persons admitted to a hospital with a primary diagnosis of arthritis in 1999 were $18,793,376, which represented 9% of the total Medicare dollars paid for all diagnoses.

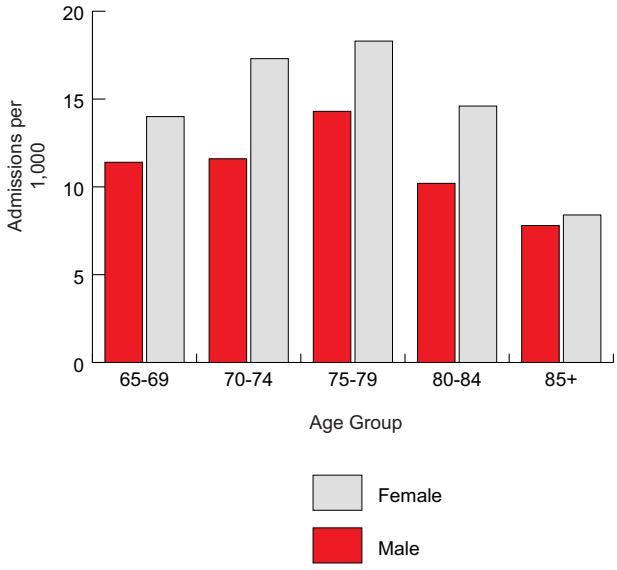
- ✔ During 1999, Medicare clients admitted to a hospital with a primary diagnosis of arthritis spent 8,964 patient days in Utah hospitals, which accounted for 6% of all hospital days for Medicare clients.

- ✔ Total hip replacements for Medicare clients with a primary diagnosis of arthritis amounted to 2% of all admissions in 1999. Medicare dollars paying for hip replacements with a primary diagnosis of arthritis was $5,097,879. This represents 3% of the Medicare dollars paid for all diagnoses.

✔ Total knee replacements for Medicare clients with a primary diagnosis of arthritis amounted to 4% of all admissions in 1999. Medicare dollars paying for knee replacements with a primary diagnosis of arthritis was $10,896,937. This represents 5% of the Medicare dollars paid for all diagnoses.

✔ Females 65 and older who were enrolled in Medicare were more likely to be admitted to a hospital due to arthritis than males 65 and older who enrolled in Medicare, across all age groups (Figure 19.)

Figure 19. 1999 Utah Medicare Hospital Admissions
With a Primary Diagnosis of Arthritis
by Age Group and Gender



References

1 Centers for Disease Control and Prevention (July 23, 2001). Targeting Arthritis: The Nation's Leading Cause of Disability At-A-Glance 2001.

2 Bureau of the Census and CDC, Survey of Income and Program Participation, 1999.

3 Centers for Disease Control and Prevention (1999). Impact of arthritis and other rheumatic conditions on the health-care system. Morbidity and Mortality Weekly Report, 48(17): 349-353.

4 Arthritis Foundation, Association of State and Territorial Health Officials and CDC. National Arthritis Action Plan: A Public Health Strategy. Atlanta, Georgia: Arthritis Foundation; 1999.

5 Centers for Disease Control and Prevention (1996). Prevalence of Arthritis by Race and Ethnicity-United States. Morbidity and Mortality Weekly Report, 45(18) pages 373-378.

6 Felson DT, Zhang Y. An update on the epidemiology of knee and hip osteoarthritis with a view to prevention. Arthritis Rheum 1998; 41(8):1343-55.

7 Felson DT, Hannan MT, Naimark A, et al. Occupational physical demands, knee bending, and knee osteoarthritis: results from the Framingham Study. J. Rheumatol 1991; 18:1587-92.

8 Roubenoff R, Klag MJ, Mead LA, et al. Incidence and risk factors for gout in white men. JAMA 1991;266(21):3004-7.

9 U.S. Department of Health and Human Services. Physical activity and health: a report of the Surgeon General. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, 1996.

10 Centers for Disease Control and Prevention (June 14, 1996). Factors Associated with Prevalent Self-Reported Arthritis and Rheumatic Conditions. Morbidity and Mortality Weekly Report, Vol. 45 No. 23 page 487.

Resources

State Resources

Arthritis Foundation
Utah/Idaho Chapter
448 East 400 South, Suite 103
Salt Lake City, Utah 84111
(801)-536-0990
1-800-444-4993
www.arthritis.org
Contact: Lisa Fall

University of Utah
Department of Immunology and Rheumatology
School of Medicine
50 North Medical Drive
Salt Lake City, Utah 84132
(801)-581-5319

Division of Aging and Adult Services
Department of Human Resources
120 North 200 West
PO Box 45500
Salt Lake City, Utah 84145-0500
(801)-538-3910

Utah Arthritis Program
Utah Department of Health
Bureau of Health Promotion
PO Box 142107
Salt Lake City, Utah 84114-2107
(801)-538-9192
http://health.utah.gov/arthritis
Contact: Richard Bullough

Department of Veteran Affairs
Medical Center
500 Foothill Boulevard
Salt Lake City, Utah 84148-9998
(801)-584-1277

National Resources

American Physical Therapy Association
1111 N. Fairfax St.
Alexandria, VA 22314
(703) 684-2782
www.apta.org

Fibromyalgia Alliance of America
PO Box 21990
Columbus, OH 43221-0990
(614) 457-4222

Lupus Foundation of America
1300 Piccard Dr., Suite 200
Rockville, MD 20850-4303
(301) 670-9292 or (888) 385-8787
www.lupus.org

National Institute of Arthritis and Musculoskeletal & Skin Diseases
Bldg. 31/Room 4C05
31 Center Drive, MSC 2350
Bethesda, MD 20892-2350
(301) 496-8190
http://www.nih.gov/niams/

Arthritis Foundation
1330 West Peachtree St.
Atlanta, GA 30309
(404) 872-7100 or (800) 283-7800
www.arthritis.org

National Fibromyalgia Research Association
PO Box 500
Salem, OR 97302
(503) 588-1411 or (800) 574-3468
www.teleport.com~nfra

American College of Rheumatology
1800 Century Place, Suite 250
Atlanta, GA 30345
(404) 633-3777
arc@rheumatology.org

Centers for Disease Control and Prevention Health Care and Aging Studies Branch
4770 Buford Highway
MS K-45
Atlanta, GA 30341-3724
(770) 488-5464
www.cdc.gov/nccdphp/arthritis/index.htm

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We welcome your opinions of this report. Please help us by completing this form and returning it to:

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Utah Department of Health
P.O. Box 142107
Salt Lake City, Utah 84114-2107

1. Which information did you find most useful in this report?

2. Did any information found in this report surprise you? If so, what information?

3. How did you use the information in this report?
   a. Setting priorities and strategic planning
   b. Background information for research
   c. Advocacy for a special population group
   d. Satisfying requests for information from others who contact you
   e. Other (Specify) _____

4. How could we make the information more useful?

	Yes	No
5. a. Was the purpose clearly stated?	___	___
b. Could you find information easily?	___	___
c. Was the information clear and understandable?	___	___
d. Were the tables easy to understand?	___	___
e. Were the graphs easy to understand?	___	___
f. Did it have a professional appearance?	___	___
g. Did the report contain the right amount of information?	___	___

6. What topics would you like to see in future reports?

7. Can you tell us anything else that would help us with future reports?

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If you represent the media and would like further information, please contact:

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Additional Copies

If you would like an additional copy of this report, or tables containing data found in this report, please contact Randy Tanner at rtanner@doh.state.ut.us, or visit our web site at http://health.utah.gov/arthritis

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